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Application Serial No. 09/989,714  
In reply to Office Action of 30 September 2004

Attorney Docket No. 82937

AMENDMENTS TO THE CLAIMS

Claims 1-3 (canceled).

4. (previously presented) A method providing a stand-alone testing environment for a test object functional element of a computer system, said test object functional element having a plurality of interfaces for coupling with other elements of said computer system, said interfaces being of a type which provide communication between functional elements and which employ a predetermined interface protocol for inter-processing communication whose mode of operation involves a shared memory such that information communicated through said interfaces is passed between said functional elements by a process of notifying the addressed functional element that information is ready and providing the addressed functional element with its location in said shared memory, wherein said predetermined interface protocol is further of a type in which the location of information is distributed among a set of at least two hierarchical levels of a database formed in association with said shared memory, said hierarchical levels being organized by degree of generality of functional interface task information to be stored therein, said method comprising:

providing a computerized dialog to enable a user to create  
an input data file for said test object functional

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element in a form for subsequently being stored in an  
identifiable location in said shared memory;

prompting a user for at least one functional element  
interface task which has been previously developed  
utilizing said stand alone testing environment and  
which is of form compliant with said predetermined  
interface protocol and which is stored with its  
identifiable location in said shared memory;

starting said at least one functional element interface  
task utilizing said computer dialog created input data  
file;

monitoring said plurality of interfaces; and

creating a test case generation file by providing the user  
with a corresponding set of task creation options  
related to said at least one functional element  
interface task individually operative with a degree of  
generality of functional task information that is to  
be stored in a corresponding individual level of said  
set of at least two hierarchical levels of said  
database..

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5. (previously presented) The method of claim 4 further comprising storing a unique interface file corresponding to each functional element interface task selected by a user in response to said prompting.

6. (previously presented) The method of claim 5 further comprising storing said user created input data file in a user defined functional element interface task file such that said user created file may be viewed and edited outside of said stand alone testing environment.

7. (canceled)

8. (currently amended) The method of claim [[7]] 11 wherein said step of creating a test generation file further comprises selecting test initiation features.

9. (canceled).

10. (canceled).

11. (currently amended) The A method of claim 7 for testing a test object functional element of a computer system with a

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stand-alone functional element test tool, said test object  
functional element having at least one interface for  
communicating with other functional elements of said computer  
system, said at least one interface having a predetermined  
interface protocol for inter-processing communication, wherein  
said predetermined interface protocol for inter-processing  
communication employs a mode of operation involving a memory  
shared among said test object and said other functional elements  
and in which information to be communicated through the  
interface is passed between functional elements by a process of  
notifying an addressed functional element that data is ready and  
providing the addressed functional element with a corresponding  
location in said shared memory, said interface protocol further  
being of a type in which a location of information is  
distributed among a set of at least two hierarchical levels of a  
database formed in association with said shared memory, said  
hierarchical levels being organized by degree of generality of  
functional interface task information, ~~and the said method~~  
~~further comprises~~ comprising:

creating an input data file for said test object functional  
element by prompting a user for data format and  
content compatible with said predetermined interface  
protocol;

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storing said input data file;

creating a test generation file by providing said user with  
a plurality of task creation options whereby selected  
task creation options are input into said test  
generation file which is written in a predetermined  
high level interface programmers' language adapted for  
compilation into computer code executable statements  
compatible with said predetermined protocol;

said step of providing the user with a plurality of task  
options including providing at least one corresponding  
set of options individually operative with a  
corresponding individual level of said set of at least  
two hierarchical levels of said database[[.]];

compiling said test generation file and said input data  
file to produce a test case executable file in a  
preferred programming language based on said selected  
task creation options;

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initiating a test utilizing said test case executable file  
and said input data file for testing said test object  
functional element and said at least one interface by  
monitoring a status of said test; and  
  
storing test result data related to said test.

12. (original) The method of claim 11 further comprising  
displaying said input data to a user on a file viewer.

13. (currently amended) The method of claim [[7]] 11 further  
comprising comparing said test result data with expected results  
from said test object functional element utilizing said input  
data file.

14. (canceled).

15. (currently amended) The system of claim [[14]] 19 wherein:

said input data structure is utilized to prompt a user for  
test case data being in a form cooperatively  
associated with said predetermined interface  
communication protocol to constrain said at least one  
test case data file to be compatible with said

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predetermined interface protocol;

said plurality of user interface task options provided by  
said test case generation file producing subsystem  
being in form cooperatively associated with said  
predetermined interface communication protocol to  
constrain said selected at least one interface task to  
be written in a predetermined high level interface  
programmers' language adapted for compilation into  
computer code executable statements compatible with  
said predetermined interface protocol; and

said operation of said test object functional element  
effected by said test case execution subsystem  
comprising said operation of said test object  
functional element using a file of compiled executable  
statements based upon said test case data and said  
test case generation file.

16. (canceled).

17. (canceled).

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18. (canceled).

19. (previously presented) A system operative for testing performance validity and accuracy of a test object functional element, said test object functional element forming a portion of a computer system, said test object functional element having a plurality of communication interfaces with said test object functional element constrained to be operatively responsive to a predetermined interface communication protocol, said system comprising:

a test case data file producing subsystem for facilitating the production by a user of at least one file of test case data, said test case data producing subsystem being operative for identification of an input data structure and to utilize said input data structure to prompt a user for input values of said test case data, said test case data producing subsystem being operative to store said at least one file of test case data;



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a test case generation file producing subsystem for  
facilitating the production by said user of a test  
case generation file, said test case generation file  
producing subsystem providing a plurality of user  
interface task options to provide the user with a  
choice among them in developing a test case generation  
file of a selected at least one interface task of said  
plurality of interface tasks, said selected at least  
one interface task being for communication to said  
test object functional element through a first  
predetermined at least one communication interface;

a test case execution subsystem to effect operation of said  
test object functional element based on said user  
selected at least one interface task and said at least  
one file of test case data, whereby said test case  
execution subsystem enables said user to test said  
test object functional element for validity and  
accuracy of its operation by monitoring a second  
predetermined at least one of the remaining  
communication of interfaces of said plurality of  
communication interfaces;

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said interface communication protocol being a protocol  
inter-process communication of an application  
interface task from said test object functional  
element to at least one other functional element which  
also forms a portion of said computer system;

said plurality of interfaces including a subsystem for  
implementing said inter-process communication  
interface protocol comprising a memory operatively  
connected to said test object functional element and  
to said at least one other functional element by an  
arrangement whereby said functional elements share  
said memory;

said subsystem for implementing the inter-process  
communication interface protocol employing a mode of  
operation in which data to be communicated through an  
interface is passed between functional elements by a  
process of notifying the functional element to which  
an application interface task is to be communicated that  
data is ready and providing the addressed functional  
element with the location of the data in said shared  
memory;

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said shared memory being adapted to form a database having  
a set of at least two hierarchical database levels  
organized by degree of generality of interface task  
information; and

said plurality of user interface task options provided by  
said test case generation file producing subsystem  
including providing at least one corresponding set of  
options individually operative solely with a  
corresponding level of said set of at least two  
hierarchical levels of said database.

20. (canceled).

21. (previously presented) The system of claim 19 wherein:

said input data structure is utilized to prompt a user for  
test case data being in a form cooperatively  
associated with said predetermined interface  
communication protocol to constrain said at least one  
test data file to be compatible with said  
predetermined interface protocol;

said plurality of user interface task options provided by

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said test case generation file producing subsystem being in form cooperatively associated with said predetermined interface communication protocol to constrain said selected at least one interface task to be written in a predetermined high level interface programmers' language adapted for compilation into computer code executable statements compatible with said predetermined interface protocol; and

said operation of said test object functional element effected by said test case execution subsystem comprising said operation of said test object functional element using a file of compiled executable statements based upon said test case data and said test case generation file.

22. (previously presented) The system of claim 19 wherein said test case execution subsystem is operable to effect operation of another test object functional element simultaneously with operation of said test object functional element.

23. (previously presented) The system of claim 19 wherein said test case execution subsystem is operable to monitor said at

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least one interface between said test object function element and said another test object functional element.

24. (previously presented) The system of claim 19 wherein said test case generation file producing subsystem is operative to provide the user a choice among a plurality test initiative events to cause the test to be performed upon a selected test initiation event to start flow of said test case data into said first functional element.

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